

Appln No. 09/882,352

Amdt date September 9, 2003

Reply to Office action of June 10, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A pumping light generator comprising:

two pumping light sources;

a combiner to combine pumping lights output from the two pumping light sources in orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the ~~polarizing-beam~~ combiner, wherein the birefringent medium is disposed so as to output each input pumping light from each polarization axis of the birefringent medium at practically equal optical power to the other.

Claims 2-4 (Cancelled)

5. (Currently Amended) A pumping light generator comprising:

two pumping light sources;

a combiner to combine pumping lights output from the two pumping light sources in orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the

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light output from the ~~polarizing-beam~~ combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of the output light from each pumping light source.

6. (Cancelled)

7. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources;

a combiner to combine output lights from the plurality of pumping light sources; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the combiner wherein the birefringent medium is disposed so as to output each input pumping light from each polarization axis of the birefringent medium at practically equal optical power to the others.

Claims 8-10 (Cancelled)

11. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources;

a combiner to combine output lights from the plurality of pumping light sources; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the combiner, wherein the birefringent medium

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comprises polarization dispersion longer than a coherence length of the light output from each pumping light source.

12. (Previously Presented) The pumping light generator of claim 7 wherein the birefringent medium comprises either one of rutile crystal and YVO4.

13. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources;

a combiner to combine output lights from the plurality of pumping light sources; and

a degree-of-polarization reducer to reduce the degree of polarization of the light output from the combiner, wherein the degree-of-polarization reducer comprises first and second birefringent mediums in which each polarization dispersion is longer than a coherence length of the output light from each pumping light, one polarization dispersion differs twice as much as the other one, and the second birefringent medium is arranged behind the first birefringent medium so that the light passed through the first birefringent medium is output from two polarization axes of the second birefringent medium at almost the equivalent optical power.

14. (Previously Presented) A pumping light generator comprising:

a first pumping light source that produces a first pumping light;

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a second pumping light source that produces a second pumping light;

a polarizing beam combiner to combine the first pumping light and the second pumping light in an orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of light output from the polarizing beam combiner wherein the birefringent medium is disposed so as to cause optical power of the first pumping light to equal optical power of the second pumping light at the output of the birefringent medium.

Claims 15-17 (Cancelled)

18. (Previously Presented) A pumping light generator comprising:

a first pumping light source that produces a first pumping light;

a second pumping light source that produces a second pumping light;

a polarizing beam combiner to combine the first pumping light and the second pumping light in an orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of light output from the polarizing beam combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of either the first pumping light or the second pumping light.

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19. (Previously Presented) The pumping light generator of claim 14 wherein the birefringent medium is selected from the group consisting of rutile crystal and YVO4.

20. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources that produce a plurality of pumping lights;

a combiner to combine the pumping lights and produce a light output; and

a degree-of-polarization reducer comprising a birefringent medium to reduce a degree of polarization of the light output from the combiner, wherein the birefringent medium is disposed so as to cause optical power of each pumping light which is output from the birefringent medium to be essentially equal in optical power.

Claims 21-23 (Cancelled)

24. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources that produce a plurality of pumping lights;

a combiner to combine the pumping lights and produce a light output; and

a degree-of-polarization reducer comprising a birefringent medium to reduce a degree of polarization of the light output from the combiner, wherein the birefringent medium

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comprises polarization dispersion longer than a coherence length of any of the pumping lights.

25. (Previously Presented) The pumping light generator of claim 20 wherein the birefringent medium is selected from the group consisting of rutile crystal and YVO4.

26. (Previously Presented) A pumping light generator comprising:

a plurality of pumping light sources that produce a plurality of pumping lights;

a combiner to combine the pumping lights and produce a light output; and

a degree-of-polarization reducer to reduce a degree of polarization of the light output from the combiner, wherein the degree-of-polarization reducer comprises first and second birefringent mediums each having a polarization dispersion length longer than a coherence length of any of the pumping lights, one of the polarization dispersion lengths being twice as much as the other one, and the second birefringent medium is arranged to receive light passed through the first birefringent medium, and further arranged so that the input to the two polarization axes of the second birefringent medium contribute essentially equivalent optical power to light output from the second birefringent medium.